

ABSTRACT OF THE DISCLOSURE

A radio communications system such as a radio local area network including a base station and mobile stations. The radio communications system includes an intermittent power-on type mobile station for shifting automatically to a power-on state synchronously with a received timing of a beacon signal, with a fixed period of time after the beacon signal has been received being a data receive-ready period; and a base station for emanating a beacon signal to the intermittent power-on type mobile station and communicating with the intermittent power-on type mobile station by radio while the intermittent power-on type mobile station is controlled. The base station preferentially transmits data to a normal mobile station in a normally power-on state when the data to be transmitted to the intermittent power-on type mobile station exists during the data receive-ready period of the intermittent power-on type mobile station. The radio communications system can realize improved throughput and power-saving.